

Mary Beth Faller

[The Arizona Republic](#)

Students in the science lab at Navajo Elementary School were learning how to protect houses from a raging river on Monday.

The lesson involved sticking their hands into big containers of mud as they excitedly poured water through popsicle-stick dams.

That's the kind of real-life science lesson that's celebrated at STEM schools - those that embrace an integrated science, technology, engineering and math curriculum.

Currently, Navajo is the only school in the Scottsdale Unified School District that's designated as a STEM school and the district's only elementary school that teaches science every day, according to Janey Kaufmann, the pre-K-12 science academic coach for the district.

Lone Mountain Elementary is the only STEM school in the Cave Creek Unified District.

Several issues contribute to the de-emphasis on science in elementary schools, said Shaun Holmes, Navajo's principal. He said the focus on achieving good math and reading scores especially is a contributor.

"Few elementary school teachers feel comfortable teaching science due to the lack of training in college."

Rep Harry Mitchell, D-Ariz., toured Navajo on Monday as part of his effort to boost support for STEM education.

This week, Congress is expected to vote on the America COMPETES Act, which authorizes \$84 million in funding for STEM education as well as technology research and jobs.

Mitchell has authored an amendment to the act that makes it easier for universities to offer more scholarships to train secondary-school teachers in STEM.

Currently, funding for the Robert Noyce Teacher Scholarship Program is funded half by the universities and half by the federal government.

Mitchell wants to reduce the universities' share to 30 percent.

"The teacher of the year last year was a high school math teacher, and she said that no one would admit that they don't like to read but look how easy it is to admit you don't like math," Mitchell said. "You can't start to get kids excited about math in high school or college. You need to start in elementary school."

Good support for teachers is the key to STEM, Holmes said.

"The critical thing we did was to make sure we found a way to establish a science coordinator position to support the teachers," he said.

That person can help every day and can provide professional development.

Navajo also has a dedicated technology coordinator.

All students learn technology, starting with an introduction to programming in kindergarten.

Older kids study software, three-dimensional animation and robotics.

"You have to have these people in our schools because our kids are going to go do jobs that don't exist yet, and they have to work collaboratively," Kaufman said.

Mitchell met the Robobuffs, the Navajo robotics team that made it to the semifinals of the FIRST Lego Robotics Competition in December.

Districts are working toward getting more schools designated as STEM.

In Scottsdale, Mojave Middle School is moving toward a STEM program, and Saguaro High School will too, Kaufman said.

Fountain Hills High School also is moving toward a STEM designation.